

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY
LETTERS OF PATENT OF THE UNITED STATES IS:

1. An annular combustor (13) for a gas turbine (10),
5 into which combustor (13) burners (14, 15) open on an
inlet side, and which combustor (13) extends in the
axial direction from the inlet side to an outlet side
(33) and is lined on the insides with cooled liner
segments (16, 17) for protection from the hot gases,
10 characterized in that the liner segments (16, 17) are
subdivided in the axial direction into a plurality of
parts (16, 17) arranged one behind the other.
2. The combustor as claimed in claim 1, characterized
15 in that the liner segments (16, 17) are subdivided into
two parts (16, 17).
3. The combustor as claimed in claim 2, characterized
in that the liner segments (16, 17) are subdivided
20 where the flow velocity of the hot gases is low.
4. The combustor as claimed in claim 3, characterized
in that the liner segments (16, 17) are subdivided in
such a way that the lengths of the individual segment
25 parts (16, 17) in the axial direction are approximately
the same.
5. The combustor as claimed in one of claims 1 to 4,
characterized in that the liner segments (16, 17) are
30 fastened to segment carriers (18,...,21), and in that
the segment carriers (18,...,21) are likewise
subdivided in the axial direction into a plurality of
parts (18,...,21).
- 35 6. The combustor as claimed in one of claims 1 to 5,
characterized in that the liner segments (16, 17) are
convection-cooled.

7. The combustor as claimed in claim 6, characterized in that the subdivided liner segments (16, 17) are convection-cooled separately.

5 8. The combustor as claimed in claim 7, characterized in that the cooling medium flowing through those parts (17) of the liner segments which are situated downstream is released into the hot-gas flow of the combustor (13).

10

9. The combustor as claimed in claim 6, characterized in that transition channels (22, 23) are provided between the subdivided liner segments (16, 17), through which transition channels (22, 23) the convectively
15 cooling cooling medium can flow from one part (17) of the liner segments into the other part (16) of the liner segments.

10. The combustor as claimed in one of claims 6 to 8,
20 characterized in that those parts (17) of the liner segments which are located downstream are cooled only by part of the mass flow provided overall for the cooling of the liner segments.